

IN THE CLAIMS

The enclosed list of claim is a list of all claims including those that have not been amended in the present Office Action response.

Claims 1-11 (canceled)

12. (previously amended) An apparatus, comprising:

- a) a backplane, said backplane having a plurality of switch card interfaces and a plurality of adapter card interfaces;
- b) each of said switch card interfaces having input/outputs in an arrangement that functionally mates to an ATM switch card and that functionally mates to a SONET switch card; and
- c) each of said adapter card interfaces coupled to each of said switch card interfaces, each of said adapter card interfaces having input/outputs in an arrangement that functionally mates to an ATM adapter card and that functionally mates to a SONET adapter card.

13. (original) The apparatus of claim 12 further comprising an ATM switch card mated with one of said switch card interfaces and a SONET switch card mated with another of said switch card interfaces.

14. (original) The apparatus of claim 13 further comprising an ATM adapter card mated with one of said adapter card interfaces and a SONET adapter card mated with another of said adapter card interfaces.

15. (previously amended) The apparatus of claim 14 further comprising a hybrid SONET/ATM adapter card mated with one of said adapter card interfaces, each of said adapter card interfaces having input/outputs that functionally mate to said hybrid SONET/ATM adapter card.

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16. (original) The apparatus of claim 12 further comprising a first ATM switch card mated with one of said switch card interfaces, a redundant ATM switch card mated with another of said switch card interfaces and an ATM adapter card mated with one of said adapter card interfaces.

17. (previously amended) The apparatus of claim 16 wherein said coupling between said adapter card interfaces and said switch card interfaces further comprises a plurality of major links, one major link between each said adapter card and each said switch card, each of said major links further comprising a plurality of minor links, each of said minor links further comprising a real data minor link and a redundant minor link.

18. (original) The apparatus of claim 12 further comprising a first SONET switch card mated with one of said switch card interfaces, a redundant SONET switch card mated with another of said switch card interfaces and a SONET adapter card mated with one of said adapter card interfaces.

19. (previously amended) The apparatus of claim 18 wherein said coupling between said adapter card interfaces and said switch card interfaces further comprises a plurality of major links, one major link between each said adapter card and each said switch card, a real data major link between said SONET adapter card and said first SONET switch card, a redundant major link between said SONET adapter card and said redundant SONET switch card.

20. (original) The apparatus of claim 12 further comprising four said switch card interfaces and twelve said adapter card interfaces.

21. (currently amended) A method, comprising:

- [a)] forming a first and second backplane according to a manufacturing process;
- [b)] integrating said first backplane into an ATM [networking] system, said first backplane to receive an ATM switch card for use in said ATM system; and
- [c)] integrating said second backplane into a SONET [networking] system, said second backplane to receive a SONET switch card for use in said SONET system.

22. (original) The method of claim 21 wherein said manufacturing process further comprises forming minor link conducting traces associated with a major link.

23. (original) The method of claim 22 wherein said forming minor link conducting traces further comprises forming a pair of differential transmit conducting traces.

24. (original) The method of claim 23 wherein said forming minor link conducting traces further comprises forming a pair of differential receive conducting traces.

25. (original) The method of claim 21 wherein said manufacturing process further comprises forming system bus conducting traces.

26. (original) The method of claim 21 wherein said manufacturing process further comprises forming clock traces.

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27. (original) The method of claim 21 further comprising affixing a card interface to said backplane.

28. (original) The method of claim 27 further comprising affixing an adapter card interface to said backplane.

29. (original) The method of claim 27 further comprising affixing a switch card interface to said backplane.

30. (original) The method of claim 27 further comprising affixing a processor card interface to said backplane.

31. (original) The method of claim 21 wherein said manufacturing process further comprises a lithographic process that employs a mask set.

Claim 32 (canceled)

33. (previously added) An apparatus, comprising:  
a backplane from which a pair of networking systems can be implemented, said  
backplane having a plurality of switch card interfaces and a plurality of adapter card  
interfaces, each of said switch card interfaces having input/outputs in an  
arrangement that functionally mates to an ATM switch card and that functionally  
mates to a SONET switch card, each of said adapter card interfaces coupled to each  
of said switch card interfaces, each of said adapter card interfaces having  
input/outputs in an arrangement that functionally mates to an ATM adapter card and  
that functionally mates to a SONET adapter card, a first of said networking systems  
being an ATM system where ATM adapter cards are plugged into said adapter card  
interfaces and ATM switch cards are plugged into said switch card interfaces, a  
second of said networking systems being a SONET system where SONET adapter  
cards are plugged into said adapter card interfaces and SONET switch cards are  
plugged into said switch card interfaces.

34. (previously added) The apparatus of claim 33 wherein said backplane further  
comprises a conductive trace between one of said adapter card interfaces and one  
of said switch card interfaces, said conductive trace able to transport data between  
said adapter card interface and said switch card interface if said first networking  
system is being implemented, said conductive trace able to transport data between  
said adapter card interface and said switch card interface if said second networking  
system is being implemented.

35. (previously added) The apparatus of claim 34 wherein said backplane further comprises a plurality of conductive traces between one of said adapter card interfaces and one of said switch card interfaces, each of said conductive traces able to transport data between said adapter card interface and said switch card interface if said first networking system is being implemented, each of said conductive traces able to transport data between said adapter card interface and said switch card interface if said first networking system is being implemented.

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36. (previously added) The apparatus of claim 34 wherein each adapter card interface is coupled to each switch card interface by a separate conducting trace that connects each one of said adapter card interfaces to each one of said switch card interfaces, each conductive trace able to transport data between its adapter card interface and its switch card interface if said first networking system is being implemented, each conductive trace able to transport data between its adapter card interface and its switch card interface if said second networking system is being implemented.

37. (previously added) The apparatus of claim 36 wherein each adapter card interface is coupled to each switch card interface by separate pluralities of conducting traces that connect each one of said adapter card interfaces to each one of said switch card interfaces, each plurality of conductive traces able to transport data between its adapter card interface and its switch card interface if said first networking system is being implemented, each plurality of conductive traces able to

transport data between its adapter card interface and its switch card interface if said second networking system is being implemented.

38. (previously added) The apparatus of claim 37 wherein each plurality of conducting traces has a redundant conducting trace to transport data to its corresponding switch card interface upon the failure of a switch card that is plugged into a switch card interface other than its corresponding switch card interface.

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39. (previously added) The apparatus of claim 33 wherein said backplane can be used to implement three networking systems, a third of said three networking systems being a hybrid ATM/SONET system having at least one ATM adapter card plugged into a first adapter card interface and at least one SONET adapter card plugged into a second adapter card interface, said hybrid ATM/SONET system having at least one ATM switch card plugged into a first switch card interface and at least one SONET switch card plugged into a second switch card interface.

40. (previously added) The apparatus of claim 39 wherein a hybrid ATM/SONET adapter card may also be plugged into: 1) said first adapter card interface in place of said ATM adapter card; or, 2) said second adapter card interface in place of said SONET adapter card; or, 3) a third adapter card interface.

41. (previously added) The apparatus of claim 33 wherein said backplane further comprises a processor card interface, said processor card interface coupled to said switch card interfaces and said adapter card interfaces.

42. (previously added) The apparatus of claim 41 wherein said processor card interface is said coupled to said switch and adapter card interfaces with a bus

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43. (previously added) The apparatus of claim 41 wherein said processor card interface is said coupled to said switch and adapter card interface with a clock trace.

44. (previously added) The apparatus of claim 43 wherein a processor card that plugs into said processor card comprises system clocking circuitry.

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